

**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION**

**OPERATIONAL MEMORANDUM
NO. 15**

**SUBJECT: PROCEDURE FOR PROCESSING PERMIT APPLICATIONS
SUBJECT TO FEDERAL CLEAN AIR ACT SECTION 112(g)**

EFFECTIVE DATE: SEPTEMBER 25, 1998

PREAMBLE

Rule 299(e) [R 336.1299(e)] which became effective on July 2, 1998, adopts by reference the regulations implementing Section 112(g) of the federal Clean Air Act (CAA). These regulations are codified as 40 CFR §63.40 through §63.44 (see Attachment A) and are subsequently referenced herein. These regulations require that any constructed or reconstructed major source of hazardous air pollutants (HAPs) be equipped with Maximum Achievable Control Technology (MACT) to control HAP emissions. A major source of HAPs has emissions of a single HAP greater than or equal to 10 tons per year, or emissions of a combination of HAPs greater than or equal to 25 tons per year. The regulations do not apply to major sources of HAPs which are already subject to a MACT standard promulgated under Section 112(d) or Section 112(h) or a MACT determination made pursuant to Section 112(j) of the federal CAA.

This operational memorandum is designed to provide guidance on submittal of a complete permit to install application for permit applicants proposing facilities subject to these requirements. It will also provide guidance to Air Quality Division (AQD) staff on how to evaluate such applications.

Adherence to this guidance by both permit applicants and AQD staff is especially important. The federal regulations provide very specific time lines for review and approval of subject applications, and does not provide for extensions or variances. Additionally, as a federal pre-construction program, sources subject to these requirements are not eligible for a waiver, pursuant to Rule 202 [R 336.1202], to commence construction prior to approval of the permit to install [ref. 40 CFR §63.43(c)(2)(ii)].

POLICY

The Michigan Department of Environmental Quality (Department), AQD, will evaluate and act upon a permit application for a facility subject to Rule 299(e) consistent with the provisions of the adopted regulations [40 CFR §63.40 through §63.44], and all other applicable provisions of the Department's rules. A permit application submitted for a facility subject to Rule 299(e) is considered to be an application for a MACT determination pursuant to §63.43(c)(2)(ii).

The Section 112(g) regulations became effective on June 29, 1998. Any permit to install application submitted on or after this date for construction or reconstruction of a major source of HAPs that is subject to these regulations as described above will be processed in accordance with this memorandum.

A permit to install application for a facility subject to Rule 299(e) should meet the following criteria:

1. The application is for a permit to install required pursuant to Rule 201 [R 336.1201], and covers only construction or reconstruction. Rule 201 also requires a permit to install for alteration or modification, but an application covered under this memorandum would not normally include these actions because the Section 112(g) regulations do not apply to these actions. However, alteration or modification of other emissions units may be occurring that is related to the proposed constructed or reconstructed emission unit, and to meet other permitting requirements it may be appropriate to include all of these actions in the same application. Limiting the application to only the emission unit(s) subject to Rule 299(e) and related emissions units is desirable to avoid compromising the timing requirements of Section 112(g). In addition, a permit to install application for a facility subject to Rule 299(e) should not include plant wide applicability limits (PALs) pursuant to Rule 1415 [R 336.2415]. PALs should be covered in a separate permit to install application.
2. The application is submitted using all forms, and with all information as detailed below.

A complete permit to install application for a facility subject to Rule 299(e) must include all of the following information:

1. A completed air use permit application (form EQP 5615). The application should clearly state that it is for a source subject to Rule 299(e).
2. The information required by Rule 203 [R 336.1203] and other applicable rules and regulations. The document entitled "Information Required for an Administratively Complete Permit to Install Application Assembly Instructions and General Information Requirements" (see Attachment B) should be used to determine all of the general information necessary for the application. Any applicable process/process equipment specific sheet(s) (available from the AQD upon request) should be consulted to determine if additional specific information is required.
3. If the application is to:
 - a) *construct a major source at a greenfield site or to reconstruct a major source*, all of the information specified in §63.43(e)(2)(i) through (xii) (See Attachment C);
 - b) *construct a major source at a developed site*, and:

- i. the applicant is choosing to meet the criteria specified in §63.41 under the second definition of “construct a major source,” a demonstration that the proposal meets the requirements of parts (2)(i) through (iii) of this definition, and the information specified in §63.43(e)(2)(i) through (x).
- ii. the applicant is choosing not to meet the criteria specified in §63.41 under the second definition of “construct a major source,” all of the information specified in §63.43(e)(2)(i) through (xii).

*[Note: The following step does **not** apply to applications to construct a major source at an existing site, where the applicant meets the criteria specified in §63.41 under the second definition of “construct a major source.”]*

4. An analysis of MACT. Process or control technologies that have been considered and rejected as part of the control technology assessment shall be identified.

The format of the MACT analysis should follow the general format specified in Attachment D. A tabular summary of the results must be provided. Copies of any vendor quotes, and efficiency or emission limitation guarantees shall be included.

PROCEDURE

RESPONSIBILITIES OF THE APPLICANT

1. Submittal of a complete permit application, as specified above.
2. Submittal of a complete MACT determination analysis.
3. Timely response to all information requests from the department.

RESPONSIBILITIES OF AQD PERMIT SECTION STAFF

Attachment E is a flow sheet depicting the administrative time frames in §63.43(f) *Administrative procedures for review of a Notice of MACT Approval*. These are the time lines that must be followed for review of a permit to install application covered under this memorandum. The following steps are a written description of how AQD Permit Section staff will meet these requirements.

1. Receive the permit application and screen for administrative completeness. If there is a waiver request, the screener should attach a note to the request alerting the district office that the source appears to be subject to Rule 299(e), and if this is the case, the waiver must be denied. The appropriate Unit Supervisor or her/his designee will assign the application to a staff permit reviewer.
2. The permit reviewer will review the application for new source review (NSR) technical completeness within 30 calendar days after receipt of the application. Rule 299(e) requires the department notify the applicant as to whether or not the MACT determination is complete within 45 days after receipt of the application. The review for NSR technical completeness and Rule 299(e) MACT determination completeness will be

done concurrently. An incomplete application and requests for information will be handled pursuant to standard AQD procedures. Once the application is considered technically complete for NSR and the MACT determination is complete, the permit reviewer will proceed with Step 3.

3. If the permit reviewer determines that the application is approvable, AQD staff will notify the applicant, in writing, of the intent to approve the application. This is considered an initial approval pursuant to §63.43(f)(2). The notification must occur within 30 calendar days after the applicant has been notified in writing that the application is complete. (Proceed to Step 6.)
4. If the permit reviewer determines that the application is **not** approvable, AQD staff will notify the applicant, in writing, of the intent to deny the application. This is considered an "intent to disapprove" pursuant to §63.43(f)(2). The notice will clearly state the reasons why the MACT determination is not approvable, and will give the applicant 60 calendar days after receipt of the notice to provide additional information. The notification will be sent by certified mail, receipt requested. The notification must occur within 30 calendar days after the applicant has been notified in writing that the application is complete.

Also, pursuant to Section 5510 of Act 451, [MCL §324.5510] the opportunity for public comment is required on proposed denial actions. Although the applicant may ultimately provide information which enables the AQD to notify the applicant of an intent to approve the application, the notice of intent to deny the application will include notice of a public comment period and opportunity for hearing if requested. This is necessary to meet the time lines specified in §63.43(f)(4) as closely as possible while also meeting the requirements of Section 5510. The public comment period will commence on the date written notification of intent to deny is sent to the applicant.

The applicant may withdraw the application at any time and resubmit a new application when information that addresses the deficiencies cited by the reviewer becomes available.

5. a. If the applicant does not provide a response, or the information provided is insufficient to make the application approvable within the 60 day period, the Department decision maker shall deny the application, without prejudice, within 90 days after the initial notice of intent to disapprove or within 30 days after the additional information is received, whichever is earlier.
- b. If the applicant submits information within the required 60-day period that results in making the application approvable, the permit reviewer will proceed with a notification of an intent to approve pursuant to Step 3.

6. Permit approval

Public participation is always required for a Notice of MACT Approval. If the application is approvable, the application shall be announced for public comment following Department procedures and in accordance with Rule 205 [R 336.1205] and Section 5511 of Act 451 [MCL §324.5511]. The remainder of the permitting process, including written notification of the applicant, will follow standard procedures. The U.S. Environmental Protection Agency (EPA), Region V, must be copied on all notices and correspondence, including the final permit approval.

This memorandum is intended to provide guidance to AQD staff to foster consistent application of Part 55 of Act 451 of the Public Acts of 1994, the Natural Resources and Environmental Protection Act, and the administrative rules promulgated thereunder. This document is not intended to convey any rights to any parties nor create any duties or responsibilities under law. This document and matters addressed herein are subject to revision.

Questions regarding this memorandum should be directed to Mr. Gregory M. Edwards, Supervisor, Chemical Process Unit, Permit Section, at 517-335-3693.

RJ:GE:JF:SLB

List of Attachments:

Attachment	Description
A	Section 112(g) regulations 40 CFR §63.40 through §63.44
B	Information Required for a Complete Application
C	Checklist Information
D	MACT analysis guidelines
E	Flow sheet: Section 112(g) Administrative Procedures

Attachment A

Section 112(g) Regulations

For the reasons set out in the preamble, part 63 of chapter I of title 40 of the Code of Federal Regulations is amended as follows:

1. The authority citation for part 63 continues to read as follows:

Authority: 42 U.S.C. 7401 et seq.

Subpart B--Requirements for Control Technology

Determinations for Major Sources In Accordance with CAA Sections, Section 112(g) and 112(j).

2. Part 63 is amended by adding new §§63.40 through 63.44 to subpart B to read as follows:

§63.40 Applicability of §§63.40 through 63.44

(a) *Applicability.* The requirements of §§63.40 through 63.44 of this subpart carry out section 112(g)(2)(B) of the 1990 Amendments.

(b) *Overall requirements.* The requirements of §§63.40 through 63.44 of this subpart apply to any owner or operator who constructs or reconstructs a major source of hazardous air pollutants after the effective date of section 112(g)(2)(B) (as defined in §63.41) and the effective date of a title V permit program in the State or local jurisdiction in which the major source is (or would be) located unless the major source in question has been specifically regulated or exempted from regulation under a standard issued pursuant to section 112(d), section 112(h), or section 112(j) and incorporated in another subpart of part 63, or the owner or operator of such major source has received all necessary air quality permits for such construction or reconstruction project before the effective date of section 112(g)(2)(B).

(c) *Exclusion for electric utility steam generating units.* The requirements of this subpart do not apply to electric utility steam generating units unless and until such time as these units are added to the source category list pursuant to section 112(c)(5) of the Act.

(d) *Relationship to State and local requirements.* Nothing in this subpart shall prevent a State or local agency from imposing more stringent requirements than those contained in this subpart.

(e) *Exclusion for stationary sources in deleted source categories.* The requirements of this subpart do not apply to stationary sources that are within a source category that has been deleted from the source category list pursuant to section 112(c)(9) of the Act.

(f) *Exclusion for research and development activities.* The requirements of this subpart do not apply to research and development activities, as defined in §63.41.

§63.41 Definitions.

Terms used in this subpart that are not defined in this section have the meaning given to them in the Act and in subpart A.

Affected source means the stationary source or group of stationary sources which, when fabricated (on site), erected, or installed meets the definition of “construct a major source” or the definition of “reconstruct a major source” contained in this section.

Affected States are all States:

(1) Whose air quality may be affected and that are contiguous to the State in which a MACT determination is made in accordance with this subpart; or

(2) Whose air quality may be affected and that are within 50 miles of the major source for which a MACT determination is made in accordance with this subpart.

Available information means, for purposes of identifying control technology options for the affected source, information contained in the following information sources as of the date of approval of the MACT determination by the permitting authority:

(1) A relevant proposed regulation, including all supporting information;

(2) Background information documents for a draft or proposed regulation;

(3) Data and information available for the Control Technology Center developed pursuant to section 113 of the Act;

(4) Data and information contained in the Aerometric Information Retrieval System including information in the MACT data base;

(5) Any additional information that can be expeditiously provided by the Administrator; and

(6) For the purpose of determinations by the permitting authority, any additional information provided by the applicant or others, and any additional information considered available by the permitting authority.

Construct a major source means:

(1) To fabricate, erect, or install at any greenfield site a stationary source or group of stationary sources which is located within a contiguous area and under common control and which emits or has the potential to emit 10 tons per year of any HAP's or 25 tons per year of any combination of HAP, or

(2) To fabricate, erect, or install at any developed site a new process or production unit which in and of itself emits or has the potential to emit 10 tons per year of any HAP or 25 tons per year of any combination of HAP, unless the process or production unit satisfies criteria in paragraphs (2) (i) through (vi) of this definition.

(i) All HAP emitted by the process or production unit that would otherwise be controlled under the requirements of this subpart will be controlled by emission control equipment which was previously installed at the same site as the process or production unit;

(ii) (A) The permitting authority has determined within a period of 5 years prior to the fabrication, erection, or installation of the process or production unit that the existing emission control equipment represented best available control technology (BACT), lowest achievable emission rate (LAER) under 40 CFR part 51 or 52, toxics--best available control technology (T-BACT), or MACT based on State air toxic rules for the category of pollutants which includes those HAP's to be emitted by the process or production unit; or

(B) The permitting authority determines that the control of HAP emissions provided by the existing equipment will be equivalent to that level of control currently achieved by other well-controlled similar sources (i.e., equivalent to the level of control that would be provided by a current BACT, LAER, T-BACT, or State air toxic rule MACT determination);

(iii) The permitting authority determines that the percent control efficiency for emissions of HAP from all sources to be controlled by the existing control equipment will be equivalent to the percent control efficiency provided by the control equipment prior to the inclusion of the new process or production unit;

(iv) The permitting authority has provided notice and an opportunity for public comment concerning its determination that criteria in paragraphs (2)(i), (2)(ii), and (2)(iii) of this definition apply and concerning the continued adequacy of any prior LAER, BACT, T-BACT, or State air toxic rule MACT determination;

(v) If any commenter has asserted that a prior LAER, BACT, T-BACT, or State air toxic rule MACT determination is no longer adequate, the permitting authority has determined that the level of control required by that prior determination remains adequate; and

(vi) Any emission limitations, work practice requirements, or other terms and conditions upon which the above determinations by the permitting authority are applicable requirements under section 504(a) and either have been incorporated into any existing title V permit for the affected facility or will be incorporated into such permit upon issuance.

Control technology means measures, processes, methods, systems, or techniques to limit the emission of HAPS through process changes, substitution of materials or other modifications;

(1) Reduce the quantity of, or eliminate emissions of, such pollutants through process changes, substitution of materials or other modifications;

(2) Enclose systems or processes to eliminate emissions;

(3) Collect, capture or treat such pollutants when released from a process, stack, storage or fugitive emissions point;

(4) Are design, equipment, work practice, or operational standards (including requirements for operator training or certification) as provided in 42 U.S.C. 7412(h); or

(5) Are a combination of paragraphs (1) through (4) of this definition.

Effective date of section 112(g)(2)(B) in a State or local jurisdiction means the effective date specified by the permitting authority at the time the permitting authority adopts a program to implement section 112(g) with respect to construction or reconstruction or major sources of HAP, or June 29, 1998 whichever is earlier.

Electric utility steam generating unit means any fossil fuel fired combustion unit of more than 25 megawatts that serves a generator that produces electricity for sale. A unit that co-generates steam and electricity and supplies more than one-third of its potential electric output capacity and more than 25 megawatts electric output to any utility power distribution system for sale shall be considered an electric utility steam generating unit.

Greenfield site means a contiguous area under common control that is an undeveloped site.

List of Source Categories means the Source Category List required by section 112(c) of the Act.

MACT emission limitation for new sources means the emission limitation which is not less stringent than the emission limitation achieved in practice by the best controlled similar source, and which reflects the maximum degree of deduction in emissions that the permitting authority, taking into consideration the cost of achieving such emission reduction, and any non-air quality health and environmental impacts and energy requirements, determines is achievable by the constructed or reconstructed major source.

Notice of MACT Approval means a document issued by a permitting authority containing all federally enforceable conditions necessary to enforce the application and operation of MACT or other control technologies such that the MACT emission limitation is met.

Permitting authority means the permitting authority as defined in part 70 or 71 of this chapter.

Process or production unit means any collection of structures and/or equipment, that processes assembles, applies, or otherwise uses material inputs to produce or store an intermediate or final product. A single facility may contain more than one process or production unit.

Reconstruct a major source means the replacement of components at an existing process or production unit that in and of itself emits or has that potential to emit 10 tons per year of any HAP or 25 tons per year of any combination of HAP, whenever:

(1) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable process or production unit; and

(2) It is technically and economically feasible for the reconstructed major source to meet the applicable MACT emission limitation for new sources established under this subpart.

Research and development activities means activities conducted at a research or laboratory facility whose primary purpose is to conduct research and development into new processes and products, where such source is operated under the close supervision of technically trained personnel and is not engaged in the manufacture of products for sale or exchange for commercial profit, except in a *de minimis* manner.

Similar source means a stationary source or process that has comparable emissions and is structurally similar in design and capacity to a constructed or reconstructed major source such that the source could be controlled using the same control technology.

§63.42 Program requirements governing construction or reconstruction of major sources.

(a) *Adoption of program.* Each permitting authority shall review its existing programs, procedures, and criteria for preconstruction review for conformity to the requirements established by §§63.40 through 63.44, shall make any additions and revisions to its existing programs, procedures, and criteria that the permitting authority deems necessary to properly effectuate §§63.40 through 63.44, and shall adopt a program to implement section 112(g) with respect to construction or reconstruction of major sources of HAP. As part of the adoption by the permitting authority of a program to implement section 112(g) with respect to construction or reconstruction of major sources of HAP, the chief executive officer of the permitting authority shall certify that the program satisfies all applicable requirements established by §§63.40 through 63.44, and shall specify an effective date for that program which is not later than June 29, 1998. Prior to the specified effective date, the permitting authority shall publish a notice stating that the permitting authority has adopted a program to implement section 112(g) with respect to construction or reconstruction of major sources of HAP and stating the effective date, and shall provide a written description of the program to the Administrator through the appropriate EPA Regional Office. Nothing in this section shall be construed either:

(1) To require that any owner or operator of a stationary source comply with any requirement adopted by the permitting authority which is not intended to implement section 112(g) with respect to construction or reconstruction of major sources of HAP; or

(2) To preclude the permitting authority from enforcing any requirements not intended to implement section 112(g) with respect to construction or reconstruction of major sources of HAP under any other provision of applicable law.

(b) *Failure to adopt program.* In the event that the permitting authority fails to adopt a program to implement section 112(g) with respect to construction or reconstruction of major sources of HAP with an effective date on or before June 29, 1998, and the permitting authority concludes that it is able to make case-by-case MACT determinations which conform to the provisions of §63.43 in the absence of such a program, the permitting authority may elect to make such determinations. However, in those instances where the permitting authority elects to make case-by-case MACT determinations in the absence of a program to implement section 112(g) with respect to construction or reconstruction of major sources of HAP, no such case-by-case MACT determinations shall take effect until after it has been submitted by the permitting authority in writing to the appropriate EPA Regional Office and the EPA Regional Office has concurred in writing that the case-by-case MACT determination by the permitting authority is in conformity with all requirements established by §§63.40 through 63.44. In the event that the permitting authority fails to adopt a program to implement section 112(g) with respect to construction or reconstruction of major sources of HAP with an effective date on or before June 29, 1998, and the permitting authority concludes that it is unable to make case-by-case MACT determinations in the absence of such a program, the permitting

authority may request that the EPA Regional Office adopt and implement a transitional program to implement section 112(g) with respect to construction or reconstruction of major sources of HAP in the affected State of local jurisdiction while the permitting authority completes development and adoption of a section 112(g) program. Any such transitional section 112(g) program adopted by the EPA Regional Office shall conform to all requirements established by §§63.40 through 63.44, and shall remain in effect for no more than one year. Continued failure by the permitting authority to adopt a program to implement section 112(g) with respect to construction or reconstruction of major sources of HAP shall be construed as a failure by the permitting authority to adequately administer and enforce its title V permitting program and shall constitute cause by EPA to apply the sanctions and remedies set forth in the CAA section 502(I).

(c) *Prohibition.* After the effective date of section 112(g)(2)(B) (as defined in §63.41) in a State or local jurisdiction and the effective date of the title V permit program applicable to that State or local jurisdiction, no person may begin actual construction or reconstruction of a major source of HAP in such State or local jurisdiction unless:

(1) The major source in question has been specifically regulated or exempted from regulation under a standard issued pursuant to section 112(d), section 112(h) or section 112(j) in part 63, and the owner and operator has fully complied with all procedures and requirements for preconstruction review established by that standard, including any applicable requirements set forth in subpart A of this part 63; or

(2) The permitting authority has made a final and effective case-by-case determination pursuant to the provisions of §63.43 such that emissions from the constructed or reconstructed major source will be controlled to a level no less stringent than the maximum achievable control technology emission limitation for new sources.

§63.43 MACT determinations for constructed and reconstructed major sources.

(a) *Applicability.* The requirements of this section apply to an owner or operator who constructs or reconstructs a major source of HAP subject to a case-by-case determination of MACT pursuant to §63.42(c).

(b) *Requirements for constructed and reconstructed major sources.* When a case-by-case determination of MACT is required by §63.42(c), the owner and operator shall obtain from the permitting authority an approved MACT determination according to one of the review options contained in paragraph (c) of this section.

(c) *Review options.* (1) When the permitting authority requires the owner or operator to obtain, or revise, a permit issued pursuant to title V of the Act before construction or reconstruction of the major source, or when the permitting authority allows the owner or operator at its discretion to obtain or revise such a permit before construction or reconstruction, and the owner or operator elects that option, the owner or operator shall follow the administrative procedures in the program approved under title V of the Act (or in other regulations issued pursuant to title V of the Act, where applicable).

(2) When an owner or operator is not required to obtain or revise a title V permit (or other permit issued pursuant to title V of the Act) before construction or reconstruction, the owner or operator (unless the owner or operator voluntarily follows the process to obtain a title V permit) shall either, at the discretion of the permitting authority:

(i) Apply for and obtain a Notice of MACT Approval according to the procedures outlined in paragraphs (f) through (h) of this section; or

(ii) Apply for a MACT determination under any other administrative procedures for preconstruction review and approval established by the permitting authority for a State or local jurisdiction which provide for public participation in the determination, and ensure that no person may begin actual construction or reconstruction of a major source in that State or local jurisdiction unless the permitting authority determines that the MACT emission limitation for new sources will be met.

(3) When applying for a permit pursuant to title V of the Act, an owner or operator may request approval of case-by-case MACT determinations for alternative operating scenarios. Approval of such determinations satisfies the requirements of section 112(g) of each such scenario.

(4) Regardless of the review process, the MACT emission limitation and requirements established shall be effective as required by paragraph (j) of this section, consistent with the principles established in paragraph (d) of this section, and supported by the information listed in paragraph (e) of this section. The owner or operator shall comply with the requirements in paragraphs (k) and (l) of this section, and with all applicable requirements in subpart A of this part.

(d) *Principles of MACT determinations.* The following general principles shall govern preparation by the owner or operator of each permit application or other application requiring a case-by-case MACT determination concerning construction or reconstruction of a major source, and all subsequent review of and actions taken concerning such an application by the permitting authority:

(1) The MACT emission limitation or MACT requirements recommended by the applicant and approved by the permitting authority shall not be less stringent than the emission control which is achieved in practice by the best controlled similar source, as determined by the permitting authority.

(2) Based upon available information, as defined in this subpart, the MACT emission limitation and control technology (including any requirements under paragraph (d)(3) of this section) recommended by the applicant and approved by the permitting authority shall achieve the maximum degree of reduction in emissions of HAP which can be achieved by utilizing those control technologies that can be identified from the available information, taking into consideration the costs of achieving such emission reduction and any non-air quality health and environmental impacts and energy requirements associated with the emission reduction.

(3) The applicant may recommend a specific design, equipment, work practice, or operational standard, or a combination thereof, and the permitting authority may approve such a standard if the permitting authority specifically determines that it is not feasible to prescribe or enforce an

emission limitation under the criteria set forth in section 112(h)(2) of the Act.

(4) If the Administrator has either proposed a relevant emission standard pursuant to section 112(d) or section 112(h) of the Act or adopted a presumptive MACT determination for the source category which includes the constructed or reconstructed major source, then the MACT requirements applied to the constructed or reconstructed major source shall have considered those MACT emission limitations and requirements of the proposed standard or presumptive MACT determination.

(e) *Application requirements for a case-by-case MACT determination.* (1) An application for a MACT determination (whether a permit application under title V of the Act, an application for a Notice of MACT Approval, or other document specified by the permitting authority under paragraph (c)(2)(ii) of this section) shall specify a control technology selected by the owner or operator that, if properly operated and maintained, will meet the MACT emission limitation or standard as determined according to the principles set forth in paragraph (d) of this section.

(2) In each instance where a constructed or reconstructed major source would require additional control technology or a change in control technology, the application for a MACT determination shall contain the following information:

(i) The name and address (physical location) of the major source to be constructed or reconstructed;

(ii) A brief description of the major source to be constructed or reconstructed and identification of any listed source category or categories in which it is included;

(iii) The expected commencement date for the construction or reconstruction of the major source;

(iv) The expected completion date for construction or reconstruction of the major source;

(v) the anticipated date of start-up for the constructed or reconstructed major source;

(vi) The HAP emitted by the constructed or reconstructed major source, and the estimated emission rate for each such HAP, to the extent this information is needed by the permitting authority to determine MACT;

(vii) Any federally enforceable emission limitations applicable to the constructed or reconstructed major source;

(viii) The maximum and expected utilization of capacity of the constructed or reconstructed major source, and the associated uncontrolled emission rates for that source, to the extent this information is needed by the permitting authority to determine MACT;

(ix) The controlled emissions for the constructed or reconstructed major source in tons/yr at expected and maximum utilization of capacity, to the extent this information is needed by the permitting authority to determine MACT;

(x) A recommended emission limitation for the constructed or reconstructed major source consistent with the principles set forth in paragraph (d) of this section;

(xi) The selected control technology to meet the recommended MACT emission limitation, including technical information on the design, operation, size, estimated control efficiency of the control technology (and the manufacturer's name, address, telephone number, and relevant specifications and drawings, if requested by the permitting authority);

(xii) Supporting documentation including identification of alternative control technologies considered by the applicant to meet the emission limitation, and analysis of cost and non-air quality health environmental impacts or energy requirements for the selected control technology; and

(xiii) Any other relevant information required pursuant to subpart A.

(3) In each instance where the owner or operator contends that a constructed or reconstructed major source will be in compliance, upon startup, with case-by-case MACT under this subpart without a change in control technology, the application for a MACT determination shall contain the following information:

(i) The information described in paragraphs (e)(2)(i) through (e)(2)(x) of this section; and

(ii) Documentation of the control technology in place.

(f) *Administrative procedures for review of the Notice of MACT Approval.* (1) The permitting authority will notify the owner or operator in writing, within 45 days from the date the application is first received, as to whether the application for a MACT determination is complete or whether additional information is required.

(2) The permitting authority will initially approve the recommended MACT emission limitation and other terms set forth in the application, or the permitting authority will notify the owner or operator in writing of its intent to disapprove the application, within 30 calendar days after the owner or operator is notified in writing that the application is complete.

(3) The owner or operator may present, in writing, within 60 calendar days after receipt of notice of the permitting authority's intent to disapprove the application, additional information or arguments pertaining to, or amendments to, the application for consideration by the permitting authority before it decides whether to finally disapprove the application.

(4) The permitting authority will either initially approve or issue a final disapproval of the application within 90 days after it notifies the owner or operator of an intent to disapprove or within 30 days after the date additional information is received from the owner or operator; whichever is earlier.

(5) A final determination by the permitting authority to disapprove any application will be in writing and will specify the grounds on which the disapproval is based. If any application is finally disapproved, the owner or operator may submit a subsequent application concerning construction or reconstruction of the same major source, provided that the subsequent application has been amended in response to the stated grounds for the prior disapproval.

(6) An initial decision to approve an application for a MACT determination will be set forth in the Notice of MACT Approval as described in paragraph (g) of this section.

(g) *Notice of MACT Approval.* (1) The Notice of MACT Approval will contain a MACT emission limitation (or a MACT work practice standard if the permitting authority determines it is not feasible to prescribe or enforce an emission standard) to control the emissions of HAP. The MACT emission limitation or standard will be determined by the permitting authority and will conform to the principles set forth in paragraph (d) of this section.

(2) The Notice of MACT Approval will specify any notification, operation and maintenance, performance testing,

monitoring, reporting and record keeping requirements. The Notice of MACT Approval shall include:

(i) In addition to the MACT emission limitation or MACT work practice standard established under this subpart, additional emission limits, production limits, operational limits or other terms and conditions necessary to ensure Federal enforceability of the MACT emission limitation;

(ii) Compliance certifications, testing, monitoring, reporting and record keeping requirements that are consistent with the requirements of §70.6(c) of this chapter;

(iii) In accordance with section 114(a)(3) of the Act, monitoring shall be capable of demonstrating continuous compliance during the applicable reporting period. Such monitoring data shall be of sufficient quality to be used as a basis for enforcing all applicable requirements established under this subpart, including emission limitations;

(iv) A statement requiring the owner or operator to comply with all applicable requirements contained in subpart A of this part;

(3) All provisions contained in the Notice of MACT Approval shall be federally enforceable upon the effective date of issuance of such notice, as provided by paragraph (j) of this section.

(4) The Notice of MACT Approval shall expire if construction or reconstruction has not commenced within 18 months of issuance, unless the permitting authority has granted an extension which shall not exceed an additional 12 months.

(h) *Opportunity for public comment on the Notice of MACT Approval.* (1) The permitting authority will provide opportunity for public comment on the Notice of MACT Approval, including, at a minimum:

(i) Availability for public inspection in at least one location in the area affected of the information submitted by the owner or operator and of the permitting authority's initial decision to approve the application;

(ii) A 30-day period for submittal of public comment; and

(iii) A notice by prominent advertisement in the area affected of the location of the source information and initial decision specified in paragraph (h)(1)(i) of this section.

(2) At the discretion of the permitting authority, the Notice of MACT Approval setting forth the initial decision to approve the application may become final automatically at the end of the comment period if no adverse comments are received. If adverse comments are received, the permitting authority shall have 30 days after the end of the comment period to make any necessary revisions in its analysis and decide whether to finally approve the application.

(i) *EPA notification.* The permitting authority shall send a copy of the final Notice of MACT Approval, notice of approval of a title V permit application incorporating a MACT determination (in those instances where the owner or operator either is required or elects to obtain such a permit before construction or reconstruction), or other notice of approval issued pursuant to paragraph (c)(2)(ii) of this section to the Administrator through the appropriate Regional Office, and to all other State and local air pollution control agencies having jurisdiction in affected States.

(j) *Effective date.* The effective date of a MACT determination shall be the date the Notice of MACT Approval becomes final, the date of issuance of a title V permit

incorporating a MACT determination (in those instances where the owner or operator either is required or elects to obtain such a permit before construction or reconstruction), or the date any other notice of approval issued pursuant to paragraph (c)(2)(ii) of this section becomes final.

(k) *Compliance date.* On and after the date of start-up, a constructed or reconstructed major source which is subject to the requirements of this subpart shall be in compliance with all applicable requirements specified in the MACT determination.

(l) *Compliance with MACT determinations.* (1) An owner or operator of a constructed or reconstructed major source that is subject to a MACT determination shall comply with all requirements in the final Notice of MACT Approval, the title V permit (in those instances where the owner or operator either is required or elects to obtain such a permit before construction or reconstruction), or any other final notice of approval issued pursuant to paragraph (c)(2)(ii) of this section, including but not limited to any MACT emission limitation or MACT work practice standard, and any notification, operation and maintenance, performance testing, monitoring, reporting, and recordkeeping requirements.

(2) An owner or operator of a constructed or reconstructed major source which has obtained a MACT determination shall be deemed to be in compliance with section 112(g)(2)(B) of the Act only to the extent that the constructed or reconstructed major source is in compliance with all requirements set forth in the final Notice of MACT Approval, the title V permit (in those instances where the owner or operator either is required or elects to obtain such a permit before construction or reconstruction), or any other final notice of approval issued pursuant to paragraph (c)(2)(ii) of this section. Any violation of such requirements by the owner or operator shall be deemed by the permitting authority and by EPA to be a violation of the prohibition on construction or reconstruction in section 112(g)(2)(B) for whatever period the owner or operator is determined to be in violation of such requirements, and shall subject the owner or operator to appropriate enforcement action under the Act.

(m) *Reporting to the Administrator.* Within 60 days of the issuance of a final Notice of MACT Approval, a title V permit incorporating a MACT determination (in those instances where the owner or operator either is required or elects to obtain such a permit before construction or reconstruction), or any other final notice of approval issued pursuant to paragraph (c)(2)(ii) of this section, the permitting authority shall provide a copy of such notice to the Administrator, and shall provide a summary in a compatible electronic format for inclusion in the MACT data base.

§63.44 Requirements for constructed or reconstructed major sources subject to a subsequently promulgated MACT standard or MACT requirement.

(a) if the Administrator promulgates an emission standard under section 112(d) or section 112(h) of the Act or the permitting authority issues a determination under section 112(j) of the Act that is applicable to a stationary source or group of sources which would be deemed to be a constructed or reconstructed major source under this subpart before the date

that the owner or operator has obtained a final and legally effective MACT determination under any of the review options available pursuant to §63.43, the owner or operator of the source(s) shall comply with the promulgated standard or determination rather than any MACT determination under section 112(g) by the permitting authority, and the owner or operator shall comply with the promulgated standard by the compliance date in the promulgated standard.

(b) If the Administrator promulgates an emission standard under section 112(d) or section 112(h) of the Act or the permitting authority makes a determination under section 112(j) of the Act that is applicable to a stationary source or group of sources which was deemed to be a constructed or reconstructed major source under this subpart and has been subject to a prior case-by-case MACT determination pursuant to §63.43, and the owner and operator obtained a final and legally effective case-by-case MACT determination prior to the promulgation date of such emission standard, then the permitting authority shall (if the initial title V permit has not yet been issued) issue an initial operating permit which incorporates the emission standard or determination, or shall (if the initial title V permit has been issued) revise the operating permit according to the reopening procedures in 40 CFR part 70 or part 71, whichever is relevant, to incorporate the emission standard or determination.

(1) The EPA may include in the emission standard established under section 112(d) or section 112(h) of the Act a specific compliance date for those sources which have obtained a final and legally effective MACT determination under this subpart and which have submitted the information required by §63.43 to the EPA before the close of the public comment period for the standard established under section 112(d) of the Act. Such date shall assure that the owner or operator shall comply with the promulgated standard as expeditiously as practicable, but not longer than 8 years after such standard is promulgated. In that event, the permitting authority shall incorporate the applicable compliance date in the title V operating permit.

(2) If no compliance date has been established in the promulgated 112(d) or 112(h) standard or section 112(j) determination, for those sources which have obtained a final and legally effective MACT determination under this subpart, then the permitting authority shall establish a compliance date in the permit that assures that the owner or operator shall comply with the promulgated standard or determination as expeditiously as practicable, but not longer than 8 years after such standard is promulgated or a section 112(j) determination is made.

(c) Notwithstanding the requirements of paragraphs (a) and (b) of this section, if the Administrator promulgates an emission standard under section 112(d) or section 112(h) of the Act or the permitting authority issues a determination under section 112(j) of the Act that is applicable to a stationary source or group of sources which was deemed to be a constructed or reconstructed major source under this subpart and which is the subject of a prior case-by-case MACT determination pursuant to §63.43, and the level of control required by the emission standard issued under section 112(d) or section 112(h) or the determination issued under section 112(j) is less stringent than the level of control required by any emission limitation or standard in the prior MACT determination, the permitting authority is not required to incorporate any less stringent terms

of the promulgated standard in the title V operating permit applicable to such source(s) and may in its discretion consider any more stringent provisions of the prior MACT determination to be applicable legal requirements when issuing or revising such an operating permit.

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BILLING CODE 6560-50-P

Attachment B

**Michigan Department of Environmental Quality
Air Quality Division
Hollister Building, P.O. Box 30260
Lansing, Michigan 48909-7760**

PERMIT TO INSTALL APPLICANT:

A permit to install is required to install, construct, reconstruct, relocate, alter, or modify any process or process equipment, including control equipment pertaining thereto, which may emit an air contaminant (R 336.1201). A "process" is an action, operation, or a series of actions or operations at a source that emits or has the potential to emit an air contaminant. "Process equipment" is all equipment, devices, and auxiliary components, including air pollution control equipment, stacks, and other emission points, used in a process. "Air pollution control equipment" is any method, process, or equipment that removes, reduces, or renders less noxious air contaminants discharged into the atmosphere.

One permit to install application may be submitted for one or more interrelated processes at a source. Permit to install applications for large or complex sources, or substantial modifications to existing sources, should be discussed with the Permit Section well in advance of submitting an application.

An administratively complete application for a permit to install must include reasonable responses to all requests for information on the front of the application form (EQP 5615), as well as the information requested in the instructions on the back of the application form. Please follow the instructions carefully. Failure to do so may result in your submittal being returned to you or in a delay in processing your application. All applications for permits to install, including applications to modify the terms and conditions of an existing permit to install, must include a completed application form. Any additional detailed information which will not fit in the spaces provided on the application form should be enclosed and submitted with the application form.

This document is designed to clarify the information requirements for an administratively complete application for a permit to install. The information described in this document is not intended to be all inclusive. The requirements for an administratively complete application for a permit to install are designed to provide enough information for a permit reviewer to begin a technical review. Additional information beyond that identified may be required to complete the technical review of any individual application. The specific requirements of the federal Prevention of Significant Deterioration and Nonattainment New Source Review programs are NOT addressed in this document.

CONFIDENTIAL INFORMATION: Information included in a permit to install application cannot be claimed confidential, EXCEPT for trade secrets or commercial or financial information pursuant to Section 13(1) of the Freedom of Information Act, 1976 P.A. 442, as amended. Section 5516 of Article II, Chapter 1, Part 55 of the Michigan Natural Resources and Environmental Protection Act, 1994 P.A. 451 states that any information regarding the quantity, composition or quality of the emissions from a source CANNOT be held confidential.

If you have any questions, please contact the Permit Section at the address above or call us at (517) 373-7023. This information is also available on the Internet. The Air Quality Home Page is located at <http://www.deq.state.mi.us/aqd/>. Questions and requests for pre-application meetings can also be directed to the Department of Environmental Quality, Environmental Assistance Division, Clean Air Assistance Program at (800) 662-9278.

Michigan Department of Environmental Quality
Air Quality Division

**INFORMATION REQUIRED FOR AN ADMINISTRATIVELY COMPLETE
PERMIT TO INSTALL APPLICATION
ASSEMBLY INSTRUCTIONS AND GENERAL INFORMATION REQUIREMENTS**

You must provide three (3) copies of the Department's application form (EQP 5615) and two (2) copies of any additional information submitted with the application form. APPLICATIONS CAN NOT BE ACCEPTED VIA FACSIMILE. The application forms and the originals of all additional information must be sent to Lansing. You may choose to send the copy of the additional information with the original, or you may send it directly to the appropriate District Office. If you send the copy to the District Office, you should clearly indicate this on the application form or in a cover letter. A map showing District boundary lines and list of the District Office addresses and telephone numbers is available on the Air Quality Division (AQD) Internet Home Page (URL: <http://www.deq.state.mi.us/aqd>) or by contacting the Permit Section.

This document is designed to supplement and provide a detailed description of the information requested on the back of the application form. A list of other documents that clarify the additional information requirements for specific processes, process equipment and air pollution control equipment is provided at the end of this document.

PART 1 - INSTRUCTIONS FOR COMPLETING THE APPLICATION FORM

Fill out all numbered items (1 through 10) completely, as described below.

Item No. 1 (Applicant) - The applicant should be the entity (e.g., corporation, partnership, individual owner, or government agency) that actually owns and/or is responsible for the operation of the process or process equipment. Consulting or other firms ("Authorized Agents" - see Item No. 10 below) cannot apply for a permit to install "on behalf of" another entity.

Item No. 2 (Applicant Address) - This is the address where you would like to receive correspondence regarding your application.

Item No. 3 (Equipment or Process Location) - This item need only be completed if the process location is different from the Applicant Address in Item No. 2 or if that address is a P.O. Box.

Item No. 4 (General Nature of Business) - Briefly describe your business consistent with the Standard Industrial Classification (SIC) Code provided in Item No. 6.

Item No. 5 (Equipment or Process Description) - If the process description is lengthy, or specifics may be considered confidential, a brief, general description is acceptable under this item. A detailed description should be included as part of the application package. DO NOT INDICATE "SEE ATTACHED" FOR THIS ITEM. YOU MUST PROVIDE AT LEAST A BRIEF DESCRIPTION OR YOUR SUBMITTAL WILL BE RETURNED TO YOU.

Item No. 6 (Facility Codes) - Your source's SIC Code and Site Registration Number (SRN) can be determined from the Emission Inventory Reporting forms that you submit annually to the AQD. If your application is for a new facility or if you have not had previous business with the AQD you will not have an SRN. In that case, an SRN will be assigned during the technical review of your application. A document listing the SIC Codes for various common source categories is available by contacting the Permit Section.

Item No. 7 (Action and Timing) - This item asks for the dates when installation, construction, reconstruction, or alteration; relocation; or change of ownership will be started and completed. Select only the items that apply. Note that these dates can be "estimated." You should be aware that if no dates are provided it will be assumed that the process is already installed and operating.

Item No. 8 (Name of Prior Owner) - This item helps the AQD to keep track of prior owners and permits to install for the same equipment. If there are none, please indicate this on the form.

Item No. 9 (Signature area) - Be sure the application is signed by an authorized employee of the applicant listed under Item No. 1. This signature certifies the truth of the information provided in the application. Please provide a telephone number for the individual signing the application. AUTHORIZED AGENTS CANNOT SIGN THE APPLICATION FORM (see also Item No. 10).

Item No. 10 (Contact Person) - If you are listing a contact person under Item No. 10 who is not employed directly by the applicant, such as an attorney or a consultant, a letter of authorization must be provided pursuant to Rule 204 of the Department's rules. The letter should identify those individuals and/or firms that are expected to directly communicate with and/or provide information to the Department. Authorizations for several individuals and/or firms may be provided separately or may be combined into one letter. Any authorization letter(s) should immediately follow the application form in the application package. FAILURE TO PROVIDE AN AUTHORIZATION LETTER, IF REQUIRED, WILL RESULT IN YOUR SUBMITTAL BEING RETURNED TO YOU.

PART 2 - INSTRUCTIONS FOR ADDITIONAL SUPPORTING INFORMATION

The additional information submitted as a part of a permit to install application package should be organized into sections and assembled in the following order. Each section of the package should be clearly identified.

A. Process Description

In addition to the general process description which must be included in Item No. 5 on the front of the application form, include a detailed description of each piece of process equipment included in the permit to install application. This detailed description should include all of the following information:

1. Provide the size and type along with the make and model (if known) of each piece of proposed process equipment, including any air pollution control equipment. Manufacturer's literature for the process equipment may be helpful in providing this information.
2. Provide details of the type and feed rate of each material used in or produced by the process (including intermediate products if appropriate), in pounds per hour or similar measure.

3. For fuel burning processes provide the following information related to the fuel burning device(s): make, model, size, type, number of devices and capacity range (from minimum to maximum) of each device. For gaseous fuels provide the following information: type (for gaseous fuels other than sweet natural gas or propane, include an ultimate analysis), and maximum cubic feet per hour. For fuel oil provide the following information: fuel oil grade, (for liquid fuels other than virgin fuel oil, include an ultimate analysis), maximum gallons per hour, sulfur content, and temperature to which oil is preheated (if applicable). For solid fuels provide the following information: type, ultimate analysis and maximum pounds per hour.
4. Provide the normal and maximum operating schedule for the process and/or each vent/stack, in hours per day, days per week, and weeks per year. For batch processes provide the length of time per batch and the frequency of the batch operation in batches per day and batches per month. Note that if the emissions allowed by the permit to install are based on an operating schedule less than 24 hours per day, 7 days per week and 52 weeks per year, then that reduced operating schedule may be included as an enforceable condition of the permit to install.
5. Provide a brief description of any waste generated by the process or the air pollution control equipment and the proposed method of reuse, treatment, or disposal of that waste.
6. If the application is for complex or multiple processes, include a block diagram that shows the flow of materials, including any intermediate and final products.

B. Regulatory Discussion

Describe all federal, state, and local air pollution control regulations that you believe are applicable to the proposed process. Include a discussion of how you believe the proposed process complies with each of these regulations.

C. Control Technology Analysis

Describe how the air contaminant emissions from the proposed process equipment will be controlled or otherwise minimized. "Air pollution control equipment" is any method, process, or equipment that removes, reduces, or renders less noxious air contaminants discharged into the atmosphere. This definition includes pollution prevention or other methods which result in reduced emissions from the process. Provide sufficient detail to determine the extent to which the air pollution control equipment will be used to control emissions from the other process equipment listed in this application and to determine the control efficiency of the air pollution control equipment. The information needed to show the control efficiency of the air pollution control equipment may include process-specific calculations (e.g., calculation of the particulate emission control efficiency may depend on the particle size distribution of the exhaust gas being controlled). If applicable, you must also include a description of any proposed air pollution control equipment bypass. Generally, inputs to the process must cease immediately in the event of a bypass of the air pollution control equipment, except as provided by Rules 913 and 914 (R 336.1913 and R 336.1914).

For applicable air pollution control regulations that require a control technology determination (e.g., Best Available Control Technology (BACT), BACT for toxics (T-BACT) or Lowest Achievable Emission Rate (LAER)), include a summary of all the air pollution control equipment you investigated in addition to the selected equipment described above. This discussion should also include the reasons for rejecting any air pollution control equipment with a control efficiency greater than or equal to the selected control equipment.

Separate documents containing step-by-step instructions for completing BACT and T-BACT analyses are also available by contacting the Permit Section.

D. Emissions Summary and Calculations

Explain clearly and in appropriate detail the nature, quantity (both controlled and uncontrolled), concentration, particle size, pressure, temperature, and any other pertinent characteristics of all air contaminants, including all toxic air contaminants, which may be discharged to the atmosphere. This explanation should include all of the following information:

1. A summary table of the proposed controlled and uncontrolled emissions of all air contaminants from all processes included in the application. For modifications to existing processes, this summary table should address the proposed changes in emissions which would result from the modification. The summary table should list the emissions of each pollutant in pounds per hour, tons per month, and any other units specified in any federal, state, or local air pollution control regulations which you identified as applicable to this process in the Regulatory Discussion described in Part II, Section B of this document. Attach a copy of all calculations used to determine these emission rates and describe any assumptions that were made. For repetitive calculations, a sample calculation may be provided.
2. A summary table of the proposed controlled and uncontrolled emissions of all air contaminants from each vent/stack included in the application. List each toxic air contaminant individually, including the Chemical Abstract Service (CAS) number, and provide maximum pounds per hour, stack concentration in micrograms per cubic meter ($\mu\text{g}/\text{m}^3$), and predicted ambient impact in $\mu\text{g}/\text{m}^3$. Specify the method(s) used to determine the predicted ambient impact. For some applications, detailed emissions by vent/stack may be unnecessary or inappropriate. In that case, the information on toxic air contaminants specified in this item should be provided under item D.1. above.

The maximum controlled emission rates for the process will be reflected in legally enforceable permit conditions. Therefore, all emission estimates should provide a reasonable margin of safety to ensure that the process can operate within those limits.

E. Stack/Vent Parameters

For each vent/stack include all of the following information (including possible ranges if appropriate):

1. The height of the stack/vent above ground level at the discharge point (in feet).
2. The internal diameter or dimensions of the stack/vent at the discharge point (in inches).
3. The orientation of the stack/vent discharge (i.e., vertical, horizontal, etc.).
4. The volume flow rate of the exhaust gas in cubic feet per minute (cfm). Please note whether the flow rate is based on actual or standard cfm.
5. The approximate temperature of the exhaust gas at the discharge point (in degrees Fahrenheit).

6. A description of any rain protection device.
7. If the stack/vent is to be equipped with stack testing ports, a description of the size and location of such ports.
8. Source Classification Code(s) and Control Equipment Codes for the process/equipment associated with each stack. Documents which describe the Source Classification Codes and Control Equipment Codes are also available by contacting the Permit Section.

Exhaust gases should be discharged unobstructed vertically upwards to maximize dispersion of air contaminants. In addition, a stack height design of at least 1.5 times the building height above the ground will minimize the potential for emission downwash problems.

F. Site Description and Process Equipment Location Drawings

Provide scale drawings that show a plan view of the owner's property to the boundary lines. A scaled site plan does not necessarily mean construction drawings or blueprints. A site plan should include all of the following information:

1. The outline and dimensions (length, width, and height at roof peak and eaves), in feet, of all buildings and structures on the owner's property and any other buildings or structures within either of the following:
 - Within 150 feet of any process stack/vent proposed or identified in the application, or
 - Within a distance of 5 times the height of that building or structure to any stack/vent identified or proposed in the application (e.g., the dimensions of a building with a height of 50 feet would have to be included on the site plan if it is within 250 feet (5 x 50) of a stack/vent proposed or identified in the application).
2. Show all property lines and any fence lines.
3. Locate and identify the process equipment proposed to be installed or modified in the application.
4. Show the location of all stacks/vents identified in Section E and indicate the distance to the nearest property line.
5. Indicate the direction of North and provide sufficient detail to enable the permit reviewer to accurately orient the site to the surrounding area.
6. Indicate the scale of the plan (e.g., 1 inch = 100 feet).

G. Additional Supporting Information for Specific Processes and Equipment

In addition to this document, other documents that clarify the additional information requirements for the following specific processes, process equipment and control equipment and that provide guidance on control technology review requirements are also available by contacting the Permit Section.

Processes/Process Equipment

Anhydrous Ammonia Storage
Asphalt Plants
Boilers
Chemical/Pharmaceutical Processes
Coating Operations
Concrete Plants
Crushers (Concrete, Asphalt, Rock)
Degreasers
Gas Turbines
Incinerators - General Refuse

Incinerators - Medical Waste
Material Handling Operations
Municipal Waste-to-Energy Facilities
Natural Gas Sweetening Facilities
Remediation Operations - Groundwater
Remediation Operations - Soil
Sour Oil and Gas Well Equipment
Storage Tanks - General
Waste Oil Firing Equipment
Welding Operations

Air Pollution Control Equipment

Afterburners
Condensers
Electrostatic Precipitators

Fabric Filters (baghouse, cartridge)
Scrubbers

Control Technology Reviews

Best Available Control Technology (BACT)

Best Available Control Technology for Toxics
(T-BACT)

Attachment C



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY - AIR QUALITY DIVISION

MACT INFORMATION CHECKLIST*Authorized by 1994 P.A. 451, as amended. Use of this form is voluntary.*

This checklist is provided for your convenience. Please complete and submit with your permit to install application (form EQP 5615) to facilitate review of your application.

The following information is required for a permit to install application for a facility subject to Rule 299(e). This information is required in addition to the information requested in the Permit to Install Application and in Rule 203 and must be submitted in duplicate. Failure to provide this information will result in an administratively incomplete application. Rule 299(e) adopts by reference the regulation implementing Section 112(g) of the federal Clean Air Act (CAA). These regulations are codified as 40 CFR Sections 63.40 through 63.44. The regulations require that any constructed or reconstructed major source of hazardous air pollutants (HAPs) be equipped with Maximum Achievable Control Technology (MACT) to control HAP emissions. A major source emits or has the potential to emit 10 tons per year of any single HAP or 25 tons per year of any combination of HAPs.

Additional information can be obtained from the Internet, or by calling (517) 373-7023. The Air Quality Home Page is located at <http://www.deq.state.mi.us/aqd>.

DOES THE APPLICATION INCLUDE THE FOLLOWING?			
1. A DETAILED PROCESS DESCRIPTION OF THE PROPOSED PROJECT INCLUDING ALL EMISSION POINTS	<input type="checkbox"/>	YES	<input type="checkbox"/> NO
2. COMPLETE DESCRIPTIONS OF ALL INDIVIDUAL EMISSION UNITS AND AIR POLLUTION CONTROL EQUIPMENT AFFECTED BY THE PROPOSED PROJECT	<input type="checkbox"/>	YES	<input type="checkbox"/> NO
3. A PROCESS FLOW DIAGRAM THAT SHOWS ALL EMISSION UNITS AND AIR POLLUTION CONTROL EQUIPMENT, AND THE RELATIONSHIP AND CONNECTIONS BETWEEN THESE ITEMS AT THE SOURCE, IF THESE RELATIONSHIPS ARE ALTERED BY THE PROPOSED PROJECT	<input type="checkbox"/>	YES	<input type="checkbox"/> NO
4. A DESCRIPTION OF ANY LISTED SOURCE CATEGORIES IN WHICH THE MAJOR SOURCE IS INCLUDED	<input type="checkbox"/>	YES	<input type="checkbox"/> NO
5. A DESCRIPTION OF ANY FEDERALLY ENFORCEABLE EMISSION LIMITS APPLICABLE TO THE SOURCE	<input type="checkbox"/>	YES	<input type="checkbox"/> NO
6. a) THE EXPECTED COMMENCEMENT DATE FOR CONSTRUCTION/RECONSTRUCTION OF THE MAJOR SOURCE	<input type="checkbox"/>	YES	<input type="checkbox"/> NO
b) THE EXPECTED COMPLETION DATE FOR CONSTRUCTION/RECONSTRUCTION OF THE MAJOR SOURCE	<input type="checkbox"/>	YES	<input type="checkbox"/> NO
c) THE ANTICIPATED DATE OF START UP OF THE MAJOR SOURCE	<input type="checkbox"/>	YES	<input type="checkbox"/> NO
7. A HAZARDOUS AIR POLLUTANT (HAP) EMISSION SUMMARY, SUMMARIZING ESTIMATED EMISSIONS OF EACH HAP FOR THE PROPOSED PROJECT AS FOLLOWS: a) UNCONTROLLED EMISSION RATES AT EXPECTED AND MAXIMUM CAPACITY OF THE SOURCE b) CONTROLLED EMISSIONS, IN TONS PER YEAR, AT EXPECTED AND MAXIMUM CAPACITY OF THE SOURCE	<input type="checkbox"/>	YES	<input type="checkbox"/> NO
8. A RECOMMENDED EMISSION LIMITATION FOR THE SOURCE AND METHOD USED TO DETERMINE COMPLIANCE	<input type="checkbox"/>	YES	<input type="checkbox"/> NO
9. THE PROPOSED MACT FOR THE SOURCE (MACT CANDIDATE): a) DOCUMENTATION IF EXISTING CONTROL TECHNOLOGY IN OPERATION WILL BE USED TO MEET THE RECOMMENDED EMISSION LIMITATION FOR THE SOURCE, <u>OR</u> b) A SELECTED CONTROL TECHNOLOGY TO MEET THE RECOMMENDED EMISSION LIMITATION INCLUDING TECHNICAL INFORMATION ON THE DESIGN, OPERATION, SIZE, AND ESTIMATED CONTROL EFFICIENCY	<input type="checkbox"/>	YES	<input type="checkbox"/> NO
10. SUPPORT DOCUMENTATION INCLUDING IDENTIFICATION OF ALTERNATIVE CONTROL TECHNOLOGIES CONSIDERED TO MEET THE EMISSION LIMITATION, AND AN ANALYSIS OF COST, NON-AIR QUALITY HEALTH AND ENVIRONMENTAL IMPACTS, AND ENERGY REQUIREMENTS ASSOCIATED WITH THE EXPECTED EMISSION REDUCTIONS	<input type="checkbox"/>	YES	<input type="checkbox"/> NO
11. CONFIDENTIAL INFORMATION IF YES, HAS SUCH INFORMATION BEEN PROPERLY MARKED AND CLAIMED, AND COPIES OF THE APPLICATION SUITABLE FOR PUBLIC INSPECTION BEEN SUBMITTED, IN ACCORDANCE WITH ACT 451 SECTION 5516(3)?	<input type="checkbox"/>	YES	<input type="checkbox"/> NO
12. HAS THE APPLICANT RETAINED A COPY OF THIS APPLICATION AT THE SOURCE?	<input type="checkbox"/>	YES	<input type="checkbox"/> NO

Attachment D

Determination of Maximum Achievable Control Technology (MACT)

This document discusses the determination of Maximum Achievable Control Technology (MACT) as required under 40 CFR §63.40 through §63.44, also known as the Section 112(g) regulations. These regulations outline specific requirements for making a MACT determination. In addition, the Michigan Department of Environmental Quality, Air Quality Division (AQD), offers the following guidelines to assist a permit applicant in preparation of its analysis.

MACT is defined in §63.41 as “the emission limitation which is not less stringent than the emission limitation achieved in practice by the best controlled similar source, and which reflects the maximum degree of reduction in emissions that the permitting authority, taking into consideration the cost of achieving such emission reduction, and any non-air quality health and environmental impacts and energy requirements, determines is achievable by the constructed or reconstructed major source.” It should be understood that this is the definition of MACT for “new” sources, or in the case of Section 112(g) definitions, “constructed or reconstructed major sources.” This definition and this document should not be applied to existing, altered or modified sources.

I. General Requirements of Section 112(g)

- A. The analysis must be emission unit specific with respect to the HAPS emitted.
- B. The analysis must evaluate the entire range of demonstrated options, including alternatives that may be transferable from a similar source. Demonstrated options are those identified from the ‘available information’ defined in 40 CFR §63.41.
- C. The level of detail in the control options analysis should vary with the relative magnitude of the emissions and the emissions reduction achievable.
- D. The MACT emission limit(s) should be expressed on a mass per unit time basis (based on maximum capacity) and in terms of process unit variables. The mass per unit time limitation should use parameters and an averaging time appropriate to the process. The process unit variable limitation should use parameters such as (but not limited to) material processed, fuel consumed or pollutant concentration (e.g., lbs/10⁶ BTU, lbs/gal of solids applied, g/dscm).
- E. Emission limits and work practice standards must be federally enforceable. Permit conditions should specify appropriate stack testing, continuous emission monitoring, continuous process monitoring, recordkeeping, and any other parameters necessary to make the emission limitations federally enforceable. All monitoring shall be capable of demonstrating continuous compliance during the proposed averaging time(s) and reporting period(s). Although Section 112(g)-specific compliance monitoring guidance has not yet been developed, the federal Compliance Assurance Monitoring (CAM) regulations [40 CFR Part 64] and the periodic monitoring requirements of the federal Title V regulations [40 CFR Part 70] can be used as the basis for meeting the requirements of 40 CFR §63.43(g) and §63.43(l).

II. Specific Procedure (step-by-step)

A. Pollutant Applicability

MACT applies to the proposed source emitting HAPS, and considering all HAP emissions. While it is not required that each HAP emitted be considered independently, it is expected that different forms of emissions will be considered separately. For example, a proposed source that will emit both particulate HAPs and gaseous HAPs is expected to consider both particulate and gaseous emissions controls as part of the MACT determination.

B. Emission Unit Applicability

Determine all potential emission units and emission points, including fugitive units. Examples of emission points include each stack, relief valve, pump, storage pile or tank, conveyor, and valve.

C. Potentially Sensitive Concerns

Identify any potentially sensitive concerns involving energy, economic, and public health and environmental issues. All potentially sensitive air quality concerns, including the control of non-targeted pollutants, should be addressed. For example, limestone may have to be injected upstream of a baghouse to control hydrogen chloride even though arsenic compounds is the regulated hazardous air pollutant of concern in the analysis.

D. Initial Selection of MACT Control Technologies

1. Identify all alternative control strategies including (a) transferable and innovative control technologies, (b) process changes or alternative processes that inherently produce less pollution, and (c) various configurations of same technology which achieve different control efficiencies. All of the following sources of information should be investigated to ensure that all possible control strategies are identified:
 - a) A relevant proposed regulation, including all supporting information.
 - b) Background information documents for a draft or proposed regulation.
 - c) Data and information available from the United States Environmental Protection Agency's (EPA's) Control Technology Center developed pursuant to Section 112 of the federal Clean Air Act.
 - d) Data and information contained in EPA's Aerometric Informational Retrieval System (AIRS), including information in the MACT database.
 - e) Per §63.41, definition of "available information", the following information that is considered by the AQD to be available:
 - i. EPA's RACT/BACT/LAER Information Clearinghouse.
 - ii. Literature.
 - iii. Industrial surveys.
 - iv. EPA/State/Local air pollution control agency surveys.
2. Rank all possible control technology alternatives in descending order based on overall control efficiency.

E. Selection of MACT final control strategy

MACT cannot be less stringent than the emission control which is achieved in practice by the best controlled similar source. MACT must also be the most efficient alternative which is not demonstrated to be infeasible. Normally the most efficient or stringent alternative should be chosen. If the most efficient alternative is not feasible because of energy, economic, or public health and environmental impacts or other costs, then continue evaluating the less efficient

technologies. The following are examples when energy, economic, or environmental impacts may make an alternative not feasible.

- a) Energy: Natural gas for operating an afterburner is not available based on local regulations.
- b) Economic:
 - i. The increased cost of the final product (e.g., automobile, cement, coke, etc.) would increase to a level that the project would no longer be feasible. This demonstration requires that the facility submit financial information to verify this claim.
 - ii. The increased and/or incremental cost is out of proportion to the environmental benefit. (e.g., The increased cost of going from 93% control to 94% control increases the capital cost from \$2,000,000 to \$4,000,000 and the operating costs from \$500,000/year to \$1,000,000/year and only reduces the emissions of nitrogen oxides by 50 tons per year.)
- c) Environmental: A wet scrubber may create a by-product which cannot be disposed of without creating a more detrimental impact.

F. Establishment of MACT emission limit(s)

The MACT emission limits should be established with a reasonable margin of safety (e.g., 95% confidence level of available test data); and should be based on an appropriate averaging time. Additional requirements such as stack testing, continuous emission monitoring, recordkeeping, and reporting requirements that serve to make the emission limitation enforceable as a practical matter should also be established.

G. Alternative requirements

Specific design, equipment, work practice or operational standards may be proposed in lieu of control technology if it can be demonstrated to the satisfaction of the AQD that it is not feasible to establish or enforce an emission limitation. Establishment of alternative requirements is only applicable to fugitive and other sources where it is not practical to collect and control the emissions using standard methods.

Attachment E

Flow Charts

Two flow charts are provided to assist readers of the operational memorandum with a visual picture of the time involved, and timing requirements, for review procedures at both the state and federal level.

The first flow sheet depicts the timing for the **federal** requirements only. There was no attempt to overlay state requirements. The footnote at the bottom of sheet is important for understanding the process in the event of a proposed disapproval.

The second sheet depicts three timelines. The top line shows the standard requirements for a new source review permit subject to public comment requirements. The middle line shows the requirements for a source subject to Rule 299(e) [Section 112(g)], and proceeding through a proposed approval action. The last line show the requirements for a source subject to Rule 299(e), and proceeding through a proposed disapproval action.

Note to Internet users: These flow charts are not available on the AQD Internet page within the “View” version (.pdf format); however, they are part of the download version of Operational Memorandum No. 15 and are separately available to download at <http://www.deq.state.mi.us/aqd/permits/permitts.html>. Printed copies can also be obtained by contacting the Air Quality Division.